



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/779,900	02/08/2001	Norbert Ohlenbusch	P0663/7015 (RMA)	6608
23628	7590 07/18/2005		EXAM	INER
WOLF GREENFIELD & SACKS, PC			GESESSE, TILAHUN	
FEDERAL RESERVE PLAZA 600 ATLANTIC AVENUE BOSTON, MA 02210-2211			ART UNIT	PAPER NUMBER
			2684	.A. 100-100-

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/779,900	OHLENBUSCH ET AL.			
Office Action Summary	Examiner	Art Unit			
	Tilahun B. Gesessse	2684			
The MAILING DATE of this communica Period for Reply	tion appears on the cover sheet with	the correspondence address			
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICA  - Extensions of time may be available under the provisions of 3 after SIX (6) MONTHS from the mailing date of this communical if the period for reply specified above is less than thirty (30) decreased in the second of the specified above, the maximum statuted Failure to reply within the set or extended period for reply will, Any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b).	TION. 7 CFR 1.136(a). In no event, however, may a represtion. ays, a reply within the statutory minimum of thirty (ary period will apply and will expire SIX (6) MONTH by statute, cause the application to become ABAI	ly be timely filed (30) days will be considered timely. IS from the mailing date of this communication. NDONED (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed of	on <i>07 March 2005</i> .				
<u> </u>	☐ This action is non-final.				
	<u> </u>				
Disposition of Claims					
4)	are withdrawn from consideration. 1-35,40,41,43 and 48-76 is/are reje 44-47 is/are objected to.	cted.			
Application Papers					
9)☐ The specification is objected to by the E	xaminer.				
10)⊠ The drawing(s) filed on is/are: a)□ accepted or b)⊠ objected to by the Examiner.					
Applicant may not request that any objectio	n to the drawing(s) be held in abeyanc	e. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the 11) The oath or declaration is objected to by	•	•			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for a) All b) Some * c) None of:  1. Certified copies of the priority does not copies no	cuments have been received. cuments have been received in Apple he priority documents have been re Bureau (PCT Rule 17.2(a)).	plication No eceived in this National Stage			
Attachment(s)					
1) ⊠ Notice of References Cited (PTO-892) 2) ☑ Notice of Draftsperson's Patent Drawing Review (PTO-	4) Interview Sur	mmary (PTO-413) Mail Date			
<ul> <li>Notice of Braitsperson's Patent Brawing Review (FTO- 3)  Information Disclosure Statement(s) (PTO-1449 or PTO- Paper No(s)/Mail Date 3/11/03&amp; 1/30/02.</li> </ul>		ormal Patent Application (PTO-152)			

#### **DETAILED ACTION**

### Status of claims

1. This is in response to applicant's amendment filed March 7, 2005, in which claims 29 and 42 have been canceled and claims 1-28,30-41,43-50 have been amended and claims 51-76 have been added.

## Claim Objections

1. Claim 30 is objected to because of the following informalities: claim 30 depends on deleted claim 29. Appropriate correction is required. This claim does addressed in the art rejection because it depends on canceled claim.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-3,10,13-15,22,24-28,31-34,41 and 49-76 are rejected under 35 U.S.C. 102(b) as being anticipated by Natarajan et al (US patent No. 5,241,542) "Natarajan".

Regarding claim 1, Natarajan teaches a method for implementing two-way communication between at least first (MS 10,12,14,16) and second devices (MS 10,12,14,16) (see column 2, lines 40- column 3, line 6 and figure 2), comprising steps of:

Art Unit: 2684

Natarajan teaches during finite time periods (item #88) following transmission of respective first messages from the first device to the second device, using the first device to listen for second messages transmitted from the second device to the first device (see figure 8A flow chart items #88, 90 and #86),

Natarajan teaches after each of the finite time periods (item #88) following the transmission of the respective first messages from the first device to the second device, ceasing to use the first device to listen for second messages transmitted from the second device to the first device until after the first device transmits another first message to the second device (item #84 listening to lists of mobile units) and ceasing to use the second device to listen for first messages received from the first device at least occasionally when the second device is operational (column 3, lines 59-column 8, line 68, column 6, lines 6-47 and figures 4-9). The first device and second device as recites by the claim is interpreted as any other of the mobile stations participating in the power saving mechanism.

Regarding claims 2-3, Natarajan teaches the first and second devices communicate via a wireless communication link, (see figure 2) and wherein: the step comprises a step of, Natarajan teaches during the finite time periods following the transmission of the respective first messages from the first device to the second device, powering on a receiver of the wireless communication link which is included in the first device; and the step comprises a step of, after each of the finite time periods following the transmission of the respective first messages from the first device to the second

Application/Control Number: 09/779,900

Art Unit: 2684

device, powering down Of the receiver included in the first device (column 3, lines 59-column 8line 68, column 6, lines 6-47 and figures 4-9).

Regarding claims 51-52, Natarajan teaches the first and second devices communicate via a wireless communication link, (see figure 2) each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering down of the receiver included in the first device (column 3, lines 59-column 8, line 68, column 6, lines 6-47 and figures 4-9).

Regarding claim 53-54, Natarajan teaches information indicates when the first expects to send to the second device at least one subsequent first message t the second device (where the list of mobile units checks some are in the list and other not and go to sleep duration, column 6, lines 6-47, see figure 8A).

Regarding claim 55, Natarajan inherently teaches first and second devices are battery operated and carried by a person

Regarding claim 10, Natarajan teaches during finite time periods following transmission of respective third messages from a third device (10,12,14,16) to the second device, using the third device to listen for second messages transmitted from the second device to the third device (see figures 8A-9 and figure 2) and after each of the finite time periods following the transmission of the respective third messages from the third device to the second device, ceasing to use the third device to listen for second messages transmitted from the second device to the third device until after the first device transmits another first message to the second device (column 3, lines 59-column 8, line 68, column 6, lines 6-47 and figures 4-9).

Application/Control Number: 09/779,900

Art Unit: 2684

Regarding claim 13, Natarajan teaches a method for implementing two-way communication between at least first (MS 10,12,14,16) and second devices (MS 10,12,14,16) (see column 2, lines 40- column 3, line 6 and figure 2), comprising steps of:

Natarajan teaches during finite time periods (item #88) following transmission of respective first messages from the first device to the second device, using the first device to listen for second messages transmitted from the second device to the first device (see figure 8A flow chart items #88, 90 and #86),

Natarajan teaches after each of the finite time periods (item #88) following the transmission of the respective first messages from the first device to the second device, ceasing to use the first device to listen for second messages transmitted from the second device to the first device until after the first device transmits another first message to the second device (item #84 listening to lists of mobile units) and ceasing to use the second device to listen for first messages received from the first device at least occasionally when the second device is operational (column 3, lines 59-column 8, line 68, column 6, lines 6-47 and figures 4-9). The first device and second device as recites by the claim is interpreted as any other of the mobile stations participating in the power saving mechanism.

Regarding claims 14-15, Natarajan teaches the first and second devices communicate via a wireless communication link, (see figure 2) and wherein: the step comprises a step of,

Natarajan teaches during the finite time periods following the transmission of the respective first messages from the first device to the second device, powering on a receiver of the wireless communication link which is included in the first device; and the step comprises a step of, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering down of the receiver included in the first device ((column 3, lines 59-column 8, line 68, column 6, lines 6-47 and figures 4-9).

Regarding claim 56-57, Natarajan teaches the first and second devices communicate via a wireless communication link, (see figure 2) each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering down of the receiver included in the first device (column 3, lines 59-column 8, line 68, column 6, lines 6-47 and figures 4-9).

Regarding claim 58-59, Natarajan teaches information indicates when the first expects to send to the second device at least one subsequent first message t the second device (where the list of mobile units checks some are in the list and other not and go to sleep duration column 6, lines 6-47, see figure 8A).

Regarding claim 60, Natarajan inherently teaches first and second devices (portable units 10,12,14,16) are battery operated and carried by a person.

Regarding claim 22, Natarajan teaches during finite time periods following transmission of respective third messages from a third device (10,12,14,16) to the second device, using the third device to listen for second messages transmitted from the second device to the third device (see figures 8A-9 and figure 2) and after each of

the finite time periods following the transmission of the respective third messages from the third device to the second device, ceasing to use the third device to listen for second messages transmitted from the second device to the third device until after the first device transmits another first message to the second device (column 3, lines 59-column 8, line 68, column 6, lines 6-47 and figures 4-9).

Regarding claims 24 and 28, Natarajan teaches at least first and second devices capable of engaging in two-way communication (see figure 2) comprising:

Natarajan teaches a first device (mobile station 10 and 9) comprising: Natarajan teaches a first transmitter (item #44 of figure 2) a first receiver (item #44 of figure 2) and at least one first controller (item #150 of figure 9) coupled to the first transmitter and the first receiver, the at least one first controller being configured to power on the first receiver to listen for second messages from the second device during finite time periods following use of the first transmitter to transmit respective first messages to the second device, and being further configured to power down the first receiver after each of the finite time periods following use of the first transmitter to transmit respective first messages to the second device's and Natarajan teaches a second device (MSs 12 or 14) comprising: a second transmitter: a second receiver: and at least one second controller coupled to the second transmitter and the second receiver the at least one second controller being configured to power down the second receiver at least occasionally during operation of the second device (column 3, lines 59-column 8, line 68, column 6, lines 6-47 and figures 2 and 9).

Regarding claims 25-27, Natarajan teaches the at least one first controller is further configured to, after each of the finite time periods following use of the first transmitter to transmit respective first messages to the second device, power down the first receiver until after the first transmitter is used to transmit another first message to the second device (see, column 6, lines 6-47 and figure 9 and it's disclosure).

Regarding claim 31, it is a system claim, which corresponds to method claim 1, above. Therefore, it is analyzed and rejected for the same reason set forth in the claim.

Regarding claim 32, it is a system claim, which corresponds to method claim 13, above. Therefore, it is analyzed and rejected for the same reason set forth in the claim.

Regarding claims 33, it is a method claim, which corresponds to method claim 13, above. Therefore, it is analyzed and rejected for the same reason set forth in the claim.

Regarding claims 34 and 41, Natarajan teaches the first and second devices communicate via a wireless communication link, (see figure 2) and wherein: the step comprises a step of,

Natarajan teaches during the finite time periods following the transmission of the respective first messages from the first device to the second device, powering on a receiver of the wireless communication link which is included in the first device; and the step comprises a step of, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering down of the receiver included in the first device (column 3, lines 59-column 8, line 68 and figures 4-9).

Application/Control Number: 09/779,900 Page 9

Art Unit: 2684

Regarding claim 49, it is a system claim, which corresponds to method claim 1, above.

Therefore, it is analyzed and rejected for the same reason set forth in the claim.

Regarding claim 50, it is a system claim, which corresponds to method claim 13, above. Therefore, it is analyzed and rejected for the same reason set forth in the claim.

Regarding claims 63,67,71,76, Natarajan inherently teaches first and second devices are battery operated and carried by a person .

Regarding claims 64,68 and 72-73, Natarajan teaches the first and second devices communicate via a wireless communication link, (see figure 2) each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering down of the receiver included in the first device (column 3, lines 59-column 8, line 68, column 6, lines 6-47 and figures 4-9).

Regarding claims 61-62,65-66,69-70,74-75, Natarajan teaches information indicates when the first expects to send to the second device at least one subsequent first message t the second device (where the list of mobile units checks some are in the list and other not and go to sleep duration, column 6, lines 6-47 see figure 8A).

# Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

<sup>(</sup>a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 09/779,900 Page 10

Art Unit: 2684

5. Claims 4,9,16,21,35,40,43 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Natarajan in view of Welles, et al (US patent No. 5,608,412) "Welles".

Regarding claims 4,16,35,43 Natarajan does not teaches receiving a sensor input with the first device; and (c) in response to the sensor input, with the first device, generating processed data for inclusion in at least one of the first messages that are transmitted to the second device.

However, Welles teaches receiving a sensor input with the first device in response to the sensor input, with the first device, generating processed data for inclusion in at least one of the first messages that are transmitted to the second device. (see column 5, lines 35-45 and figure 2). It would have been obvious to an artisan of ordinary skill in the art to receive a sensor input in mobile device based on sensor input process a data and transmit.

Regarding claims 9,21, 40 and 48, Natarajan does not expressly teach calibration information used to generate the processed data. However, it is well known in the art to calibrate information in order to generate the processed data to another end. Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made to calibrate data information and transmit to the user.

# Response to Arguments

Applicant's arguments with respect to claims 1-28,30-41,43-50 have been considered but are most in view of the new ground(s) of rejection.

# Allowable Subject Matter

6. Claims 5-8,11-12,17-20,23,36-39 and 44-47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach generating as the processed data at least one of at least one foot contact time, a distance traveled, a pace, and a speed of the person.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Application/Control Number: 09/779,900 Page 12

Art Unit: 2684

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Fukuda (US patent No 6,169,905) discloses digital cordless telephone apparatus with master (1) and remote units (4-6) and master transmit control signal from in synchronism with reception timing of the control signal and remote turns on and off a power supply (see abstract and figures 1, 3-4).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 571-272-7879. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-2738300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TILAHUN GESESSE PRIMARY EXAMINER